# STATEMENT OF WORK Channel Stabilization (584) **Wyoming**

These deliverables apply to this individual practice. For other planned practice deliverables refer to those specific Statements of Work.

#### **DESIGN**

#### **Deliverables:**

- 1. Design surveys
  - a. Topographic and geomorphic details of area containing:
    - i. Cross section defining thalweg, water surface, bankfull, low berm/terrace and upper terrace
    - ii. Profile defining thalweg, water surface, bankfull and low berm/terrace elevations
  - b. Location and extent of trees, willows, etc.
  - c. Length of section to be protected
  - d. Reach length required for stream type determination
  - e. Soils classification
  - f. Stream Classification Pebble Count
  - g. When needed, active bed sample/ riffle pebble count
  - h. When Needed, bar sample as determined necessary
- 2. Design documentation that will demonstrate that the criteria in NRCS practice standard have been met and are compatible with other planned and applied practices.

  a. Practice purpose(s) as identified in the conservation plan

  - b. List of required permits to be obtained by the client
  - c. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06)
  - d. Practice standard criteria related computations and analyses to develop plans and specifications including but not limited to:
    - i. Geology and Soil Mechanics (NEM Subpart 531a)
    - Hydrology/Hydraulics
    - iii. Structural
    - **Environmental Considerations** iv.
    - v. Vegetation
    - Safety Considerations (NEM Part 503-Safety, Subpart A, 503.10 through 503.12)
    - vii. Stream Type
    - viii. Stability determination (i.e. evolution stage or succession scenario)
      - ix. Water surface elevations for all required
      - x. Minimum riparian setback
    - xi. Method of exclusion/management
    - xii. Protection requirements
    - xiii. Method of protection
    - xiv. Geology/Soil Mechanics
    - xv. Recurrence interval and discharge at Bankfull
    - xvi. Cross Section at Bankfull
  - xvii. Structural
  - xviii. Vegetation/Soil Bioengineering
  - xix. Records indicating NRCS obligations regarding State and Federal regulations have been met including wetland and flood plain regulations
  - Quantity and quality of materials. XX.

## STATEMENT OF WORK Channel Stabilization (584) Wyoming

- 3. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describes the requirements to install the practice and obtain necessary permits...
  - a. Overall plan view of project
    - i. Include areas of re-vegetation and/or protection
  - b. Project profile for length of proposed protection containing but not limited to
    - i. Thalweg, water surface, bankfull and low berm/terrace
    - ii. Slope values for Thalweg, water surface, bankfull and low berm/terrace, as needed
  - c. Typical cross section depicting the Thalweg, water surface, bankfull and low berm/terrace elevations
  - d. Location and details of appurtenances, such as culverts, vanes etc.
  - e. Location and details of temporary benchmarks
  - f. Source of materials
  - g. Table of quantities
  - h. Location map
- 4. Design Report and Inspection Plan as appropriate (NEM Part 511, Subpart B Documentation, 511.11 and Part 512, Subpart D Quality Assurance Activities, 512.30 through 512.32).
- 5. Operation and Maintenance Plan
- 6. Certification that the design meets practice standard criteria and comply with applicable laws and regulations (NEM Subpart A, 505.03 (a) (3)).
- 7. Design modifications during installation as required.

### **INSTALLATION**

#### **Deliverables**

- 1. Pre Installation conference with client and contractor.
- 2. Verification that client has obtained required permits.
- 3. Staking and layout according to plans and specifications including applicable layout notes.
  - a. Establishment of temporary bench marks defined in plans.
  - b. Extent of area to be protected
  - c. Necessary cut or fill stakes
  - d. Location stake for appurtenant structures
- 4. Installation inspection (according to inspection plan as appropriate).
  - a. Actual materials used (Part 512, Subchapter D Quality Assurance Activities, 512.33)
  - b. Inspection records
  - c. Length of area protected
  - d. Cross section of area protected
  - e. Size and thickness of materials and bedding
  - f. Number, size, and spacing of structures.
- 5. Facilitate and implement required design modifications with client and original designer

February 2014 Page2 of 2

## STATEMENT OF WORK Channel Stabilization (584) Wyoming

- 6. Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during installation.
- 7. Certification that the installation process and materials meets design and permit requirements.

### **CHECK OUT**

#### **Deliverables**

- 1. As-Built documentation.
  - a. Extent of practice units applied
  - b. Drawings
  - c. Final quantities
- 2. Certification that the installation meets NRCS standards and specifications and is in compliance with permits (NEM Subpart A, 505.03 (c) (1)).
- 3. Progress reporting.

### **REFERENCES**

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard Channel Stabilization, 584
- NRCS National Engineering Manual (NEM).
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook

February 2014 Page3 of 2